

ence, too, it would undoubtedly have been better to have a new palace, and in the best possible situation. But the question which the Government had to consider was, whether it was advisable for the public interest to incur so large an expense. He could not think that a handsome palace could be built for a less sum than 800,000*l.* or 900,000*l.*; and he feared the hon. member for Coventry would have been asking them to reduce rather than augment that estimate. The result was, that the Government thought it better not to incur so large an expenditure. He did not think that the building, when completed according to the proposed plan, would be so unhealthy, or such a deformity, as the hon. member seemed to suppose. He thought that the elevation, as prepared by Mr. Blore, would be a very handsome one, and that the sight for the public, in going through the parks, would be an improvement upon the present view of Buckingham Palace.

RAILWAY JOTTINGS.

FROM the Report of the Commissioners of Railways, on the pending bills in which the Great Western Company are interested, it appears, that when passed, the powers of this company will be very materially increased. By the Gloucester and Dean Forest bill, they will be authorized to construct a dock or basin at Gloucester, and to raise for that purpose, a capital of 34,000*l.* and to borrow 11,333*l.* By becoming lessees of other lines, as of this one, similar powers will be conferred on them to construct docks at Plymouth and Weymouth. The Bristol press are naturally on the *qui vive* at such a project, and are rousing the attention of the citizens to a subject so materially affecting their interests. In March last, the Bristol Chamber of Commerce memorialized the Railway Commissioners to the effect that "it is essential to the city of Bristol that the Great Western Railway Company should be precluded from embarking their capital in constructing docks, harbours, or such like undertakings."—The Great Western Company, we understand, are building a class of eight-wheeled engines. With these a speed of *eighty-five miles an hour*, it is anticipated, will be easily maintained, while the additional pair of wheels, which are placed in the rear of the engine, are expected to give great additional steadiness. The first of these engines is about to make an experimental trip.—An imperfect report is in circulation of "the sudden falling in of the tunnel now forming under Bar-street and Houndwell (Southampton) for the Dorchester and Southampton Railway, for a space of nearly 200 yards," but it appears, to have been "the old canal tunnel, which is [unavoidably or not we cannot say] crossed over by the railway tunnel diagonally," that gave way, first of all at least, and that not very suddenly, or at all events unexpectedly, as Mr. Hicks appears to have warned the Improvement Commissioners two days previously, that it "would gradually give way and a founder take place, unless means were immediately taken to secure it." Mr. Hicks was accordingly ordered to require the company, immediately, to make a diverted road, as the main road must be dangerous to pass over at the point where these tunnels cross beneath it. Ere this could be done, however, the anticipated founder took place, on the 23rd ultimo, though, fortunately, without injury to any one. But a carriage hazard has been so undiminished by the sinking of the ground, that it has been deserted, and is to be taken down.—The new railway works at Birmingham have been commenced; the London and North Western extension, by Messrs. Braunston and Gwyther, the contractors, with a skew-bridge over the Birmingham canal; piers for the viaduct at the Proof-house, and iron bridges over New Canal-street, Fazely-street, and other streets;—the Birmingham and Oxford Junction, by the same contractors, with piers of the great viaduct,—one of the largest in Britain,—extending from Carr's-lane to Milk-street, 2,800 feet, on fifty-nine arches, and other works;—and the Stour Valley line by Mr. Henfrey, the contractor, with the tunnelling at Swallow-street and Broad-street, and the shafts at Old Wharf, &c. This tunnelling is almost entirely through solid rock, so that the anticipated danger of tunnelling underneath the most busy

parts of the town is thought to be groundless. The tunnel, however, to make surety double sure, is to be lined throughout with brick.

—The following particulars relative to the North British line are from the report of Captain Coddington, R.E., and Mr. James Walker. Within two years the extensive works on the 57½ miles of this new line from Berwick to Edinburgh were formed. The bridges over it are 28 feet in width. There are but two tunnels, and these very short. The inclinations are 1 in 78, in 96, in 120, &c. The smallest radius of a curvature is half a mile in two instances. The general security of the finished works is considered to be undoubted. On the Edinburgh contract of four miles, Messrs. Lorimer and Somerville contractors, about 20 yards in length of the haunch of the arch of the tunnel under Calton-hill, have been forced down and appear distorted. On the Linton contract of five miles, Mr. George Milne contractor, the Tyne-bridge, at Linton, had two stone arches of 45 feet span, and a stone pier of 7 feet, the foundation of which being bad, allowed it to be carried away by the September flood. The rubble behind the arches was of bad quality. A permanent wooden viaduct of 85 feet opening, and therefore without a pier in the river, is to be substituted. The Cockburn's Path contract of six miles, Messrs. Ross and Mitchell, contractors, in boldness of design, is creditable to the engineer, Mr. Miller. The Tower Burn runs in a ravine 150 feet below the railway, and filled by a solid embankment, with a horse shoe shaped stone arch, 12 feet wide, and 14 feet high in the clear, to pass the water off the burn. The great weight crushed the materials of the arch. It was then obliged to be supported by timbers inside. The opening thus contracted was almost entirely stopped by straw, bushes, &c., which the September flood floated down. Thus the water accumulated and rose on the upper or south side of the embankment, which was obliged to be cut through to let it off, down to 40 feet from the bottom, at which level a trunk was placed as a temporary passage for the water. At Lamberton, four miles from Berwick, the line comes close to the sea at an elevation of 150 to 200 feet above high water. Perfect stability will not be obtained without completely protecting the foot of the slope from the wash of the waves, by means of a good breakwater of heavy stones laid at a long slope, and of such considerable thickness as to form a stop or footing to the bottom of the slope.—The bridge at Ballinacraig, on the Dumfries and Carlisle line, which is the 'largest bridge in Britain,' consists of three arches, each 50 feet in width, on either side of the great arch which spans the river from rock to rock. The latter is a semi-circle of 181 feet, the height from the water to the top of the parapet being 186 feet. The centering on which this 'stupendous' arch has been constructed (for the arch is now built) consisted of 1,200 logs of Baltic timber, each log being 14 inches on the sides. There are about 400 men employed in connection with the bridge, building stone.—The Government aid of 620,000*l.* to Irish railways moved for by the Chancellor of the Exchequer in the Commons on Monday week, is thus to be distributed amongst three of the companies who have paid up half their capital, viz., the Great South Western, 500,000*l.*; the Waterford and Kilkenny, 84,000*l.*; and the Dublin and Drogheda, 36,000*l.*; the money to be payable in five instalments, between this and November next, and the loans to bear interest at 5 per cent. until repaid. It is thought from the general favour with which the proposition was received as a substitute for the public work system, that the principle will be further extended, and that other railways will be brought into operation by loans of public money.

An improvement in the manufacture of electro-telegraphic wire has been patented by a Mr. Reid. The principle consists in the obviation of the welding of shorter bundles of wire, and the risks of failure, by welding the iron rods previous to being drawn into wire, and hence manufacturing wire in bundles of any required length or weight. Another portion of the invention consists in the cleaning of wire (preparatory to being coated with zinc or galvanized to prevent oxidation) by means of friction, instead of by acids which often corroded and injured the substance of

the wire. By means of machinery, this process is carried on with great rapidity and effect.

A COMPETITION ABROAD.

IN a new French publication entitled *Moniteur des Architectes*,* we find an advertisement for a design for a Cercle (Club-Assembly, and Concert Rooms), at Aix, in Savoy. The building is to comprise a saloon for balls and concerts, about 200 *mètres carrés*,—a room for daily meetings, about 100 *mètres carrés*; all their conveniences; refreshment and ante-rooms, dressing-rooms, &c.; card and billiard rooms; a reading-room; a café and restaurant; with billiard and a smoking-room, accessible to the public, and separated from the part devoted to the subscribers; open covered ways, a place for orange trees, lodges for a porter and coffee-house keeper, a small theatre. The plan to be drawn to a scale of 1 to 100, and a specification. The drawings showing the various fronts, staircases, sections, details of construction, added to which there must be a correct estimate of the cost. The whole not to exceed 150,000 francs (6,000*l.*). The drawings (prepared) must be sent to the president of the Cercle before the 15th of July, 1847, with a sealed letter containing the name, country, and residence of the writer, and a motto similar to one on the plans and drawings. A special committee, appointed for the purpose, will consult with persons of art to examine the designs, which will remain exhibited in the Cercle, during the whole time. The successful candidate will receive a premium of 1,500 francs cash, and 500 francs as a share in the undertaking. His name and country will be published in the principal papers of France and Piedmont. He will have the preference in directing the works in the event of his wishing so to do, and it is understood that the remuneration for this direction will be paid independently of the prize gained. The other designs will be returned to the owners or parties bearing their order. The advertisement further gives the prices of the various building materials used on the spot.

CROWN IMPROVEMENTS AT WINDSOR.

A Bill will be forthwith introduced into Parliament by Lord Morpeth, empowering the commissioners to carry into effect the most extensive of the long contemplated alterations and improvements in the approaches to the castle and town of Windsor.

From their comparatively extensive nature, involving the purchase of a number of houses, and the building of two new bridges across the Thames, it is expected that the grant of a sum exceeding 150,000*l.* will be required.

The following description of the alterations, &c., we abridge from the *Morning Post*:—

A bridge is to be constructed across the Thames at Datchet from Black Potts, to the north end of the Home Park, whence a public road is to lead into Datchet-lane and thence into Thames-street, Windsor.

The houses and buildings on the south and east side of Thames-street, and east side of High-street, are to be cleared away from the foot of the Hundred Steps, to Castle-hill, and the roadway widened. The roads leading into the Home Park or across the Long Walk are to be stopped up, and a new road made from the Sheet-street road across or under the Long Walk, through Shaw and Clay Hall farms to Old Windsor and Egham, by which Frogmore House and grounds and the Castle and Home Park will be within what may be termed "a ring fence."

A new road is to be made from Old Windsor down to the river and the second bridge, whence a new road is to run to Southly Home, near the village of Datchet, whence another new road is to run along the north bank of the Thames to Black Potts. Datchet bridge is then to be removed, and the roads and footpaths in the parish of New Windsor leading to it stopped up.

The towing-path and road in Windsor parish, lying between the two intended new bridges, are to be stopped up, and a new road and towing-path to be made on the opposite bank of the river.

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